

Serial No. 09/589,510
Group Art Unit: 1638

Amendments to the Claims:

1. (Currently Amended) An isolated polynucleotide comprising a nucleic acid sequence selected from the group consisting of:
 - (a) a nucleic acid sequence having at least 90% 95% sequence identity to SEQ ID NO: 3, wherein the % sequence identity is based on the entire coding region and is calculated by the GAP algorithm under default parameters, wherein the sequence encodes a polypeptide with RuvB activity; and
 - (b) a nucleic acid sequence which is fully complementary to the nucleic acid sequence of (a)..
2. (Cancelled)
3. (Previously Presented) A recombinant expression cassette, comprising the polynucleotide of claim 1 operably linked to a promoter.
4. (Currently Amended) A host cell comprising the ~~recombinant expression cassette~~ polynucleotide of claim ~~3~~ 1.
5. (Currently Amended) A transgenic plant comprising the ~~recombinant expression cassette~~ polynucleotide of claim ~~3~~ 1.
6. (Original) The transgenic plant of claim 5, wherein said plant is a monocot.
7. (Original) The transgenic plant of claim 5, wherein said plant is a dicot.

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8. (Original) The transgenic plant of claim 5, wherein the plant is selected from the group consisting of corn, soybean, sunflower, sorghum, canola, wheat, alfalfa, cotton, rice, barley, and millet.
9. (Currently Amended) A transgenic seed from the transgenic plant of claim 5, wherein the seed comprises the polynucleotide.
- 10-14 (Cancelled)
15. (Previously Presented) The isolated polynucleotide of claim 1, wherein the nucleic acid sequence is SEQ ID NO: 3.
16. (Currently Amended) An isolated full-length polynucleotide comprising at least 100 contiguous nucleotides of SEQ ID NO: 3, wherein the polynucleotide encodes a polypeptide with RuvB activity.
17. (Currently Amended) An isolated polynucleotide comprising a nucleic acid sequence selected from the group consisting of:
 - (a) a nucleic acid sequence encoding a polypeptide having at least 90% 95% sequence identity of the entire length of SEQ ID NO: 4, as determined by the GAP algorithm under default parameters, wherein the encoded polypeptide has RuvB activity; and,
 - (b) a nucleic acid sequence which is fully complementary to the nucleic acid sequence of (a).
18. (Cancelled)
19. (Previously Presented) The isolated polynucleotide of claim 17, wherein the polynucleotide encodes the polypeptide of SEQ ID NO: 4.

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20. (Previously Presented) A recombinant expression cassette comprising the polynucleotide of claim 17 operably linked to a promoter.
21. (Currently Amended) A host cell comprising the ~~recombinant expression cassette~~ polynucleotide of claim 20 ~~17~~.
22. (Previously Presented) The host cell of claim 21, wherein the host cell is a plant cell.
23. (Currently Amended) A transgenic plant comprising the ~~recombinant expression cassette~~ polynucleotide of claim 20 ~~17~~.
24. (Previously Presented) The transgenic plant of claim 23, wherein said plant is a monocot.
25. (Previously Presented) The transgenic plant of claim 23, wherein said plant is a dicot.
26. (Previously Presented) The transgenic plant of claim 23, wherein said plant is selected from the group consisting of maize, soybean, safflower, sunflower, sorghum, canola, wheat, alfalfa, cotton, rice, barley, and millet.
27. (Currently Amended) A transgenic seed from the transgenic plant of claim 23, wherein the seed comprises the polynucleotide.
28. (Cancelled)

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29. (New) A method of modulating the level of RuvB in a plant cell, comprising:
- (a) introducing into a plant cell a recombinant expression cassette comprising the polynucleotide of claim 1 operably linked to a promoter;
 - (b) culturing the plant cell under plant cell growing conditions; and
 - (c) expressing the polynucleotide for a time sufficient to modulate the level of RuvB in the plant cell.
30. (New) A method of modulating the level of RuvB in a plant, comprising:
- (a) introducing into a plant cell a recombinant expression cassette comprising the polynucleotide of claim 1 operably linked to a promoter;
 - (b) culturing the plant cell under plant cell growing conditions;
 - (c) regenerating a transformed plant comprising the polynucleotide; and
 - (d) expressing the polynucleotide for a time sufficient to modulate the level of RuvB in the plant.
31. (New) The method of claim 30, wherein the plant is maize.